

a pair of alignment members connected to the spacers to align the spacers at the non-display area in a constant manner; and

wherein each of the plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell.

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19. (new) The spacer body of claim 18, further comprising a pair of subsidiary alignment members, wherein the subsidiary alignment members are arranged perpendicular to the alignment members to form a rectangular frame.

20. (new) The spacer body of claim 18, wherein the exhaust grooves of each spacer are positioned along a length of the spacer while being spaced apart from each other by a predetermined distance, and wherein each spacer is provided with a plurality of image distortion prevention grooves, the image distortion preventing grooves of each spacer being positioned along a length of the spacer while being spaced apart from each other by a predetermined distance, and wherein the exhaust grooves and the image distortion preventing grooves are symmetrical to each other with respect to a longitudinal axis of the spacer.

#### REMARKS

The above identified patent application has been amended. Entry of the amendment and reconsideration and reexamination are hereby requested.

The specification has been amended to improve clarity and grammar, and to correct a number of typographical errors. A substitute specification reflecting such amendments is enclosed herewith. No new matter has been added.

Claims 1 to 4 and 6 to 20 are now in the application. Claim 5 has been cancelled. Claims 1 to 4 and 6 to 17 have been amended. New claims 18 to 20 have been added.

The Examiner has rejected Claims 1 to 9 under 35 U.S.C. §102(b) as being unpatentable over Anderson. The Examiner has further rejected claims 10 to 15 under 35 U.S.C. §103(a) as being unpatentable over Anderson in view of Jaskie, and has rejected claims 16 and 17 under 35 U.S.C. §103(a) as being unpatentable over Anderson in view of Alwan.

Applicant submits that the invention as claimed in Claim 1 as amended is neither taught, described nor suggested in Anderson.

Applicant has amended Claim 1 to call for (underlining added for emphasis) :

"... a plurality of spacers mounted within the cell such that the spacers are placed at a non-display area and extend substantially across the cell, the spacers being held between the faceplate and the backplate;

a pair of alignment members connected to the spacers such that the spacers and alignment members form a spacer body, to align the spacers at the non-display area in a constant manner; and

wherein each of said plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell."

On the other hand, Anderson teaches a stand-alone spacer. Anderson emphasizes that the stand-alone spacer must have certain tipping characteristics (for example, see column 5 line 52 to column 6 line 29, and Figure 4). Anderson requires placement of numerous such stand-alone spacers throughout the vacuum chamber in order to provide adequate support between the front plate and back plate (see column 2 lines 37 to 38 and Figures 5, 23). Anderson envisages a plurality of disconnected stand-alone spacers, each of which must have dedicated support members to maintain the spacer in an upright position. Anderson is concerned with maintaining such stand-alone spacers in an upright position until a vacuum is formed and the

frontplate and backplate are brought to bear on the stand-alone spacers. Anderson clearly does not teach, describe or suggest a single spacer body comprising a plurality of spacers joined to alignment members, wherein the spacers extend substantially across the vacuum cell, as set out in amended claim 1. Further, it is submitted that Anderson does not teach, describe or suggest exhaust grooves in the spacers for enabling fluid gas flow within the cell.

Accordingly, Applicant submits that claim 1 is not anticipated by Anderson under 35 U.S.C. §102(b).

Claims 2 to 4 and 6 to 17 are dependent on Claim 1, and thus are believed allowable based upon Claim 1. New claim 18 is believed allowable for the reasons set out above in respect of claim 1. New claims 19 and 20 are dependent on claim 18 and thus are believed allowable based upon claim 18.

Accordingly, in view of the above amendment and remarks it is submitted that the claims are patentably distinct over the prior art and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above Application is requested.

Attached hereto is a marked-up version of the changes made to the above-identified application by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

(Underlining indicates insertions. Brackets indicate deletions)

In the Claims:

Claims 1 to 4 and 6 to 17 are amended as follows:

1. (amended) A flat panel display comprising:
  - a faceplate;
  - a backplate combined with the faceplate to form a vacuum tight cell;
  - an image production unit provided within the cell to produce display images from the cell;
  - a plurality of spacers mounted within the cell such that the [spaces] spacers are placed at a non-display area and extend substantially across the cell, the spacers being held between the faceplate and the backplate; [and]
  - a pair of alignment members connected to the spacers such that the spacers and alignment members form a spacer body, [in a body] to align the spacers at the non-display area in a constant manner; and  
wherein each of said plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell.
2. (amended) The flat panel display of claim 1, wherein each alignment member is connected to one-sided end portions of the spacers.
3. (amended) The flat panel display of claim 1, wherein a longitudinal axis of each spacer is positioned parallel to a [the spacers are longitudinally placed along each one] side of the cell [plates parallel to each other].
4. (amended) The flat panel display of claim 1, further comprising a pair of subsidiary alignment members, wherein the subsidiary

alignment members are arranged perpendicular to the alignment members to form a rectangular frame.

6. (amended) The flat panel display of claim 1, [5] wherein the exhaust grooves of each spacer are positioned along a length of the spacer [arranged at the spacer in the longitudinal direction] while being spaced apart from each other by [with] a predetermined distance.

7. (amended) The flat panel display of claim 1, [5] wherein each spacer is provided with a plurality of image distortion prevention grooves [for preventing image distortion].

8. (amended) The flat panel display of claim 7, wherein the image distortion preventing grooves of each spacer are positioned along a length of the spacer [arranged at the spacer in the longitudinal direction] while being spaced apart from each other by [with] a predetermined distance.

9. (amended) The flat panel display of claim 7, wherein the exhaust grooves are positioned adjacent to the backplate and the image distortion preventing grooves are positioned adjacent to the faceplate, and wherein the exhaust grooves and the image distortion preventing grooves are symmetrical to each other with respect to a [the] longitudinal axis [center line] of the spacer.

10. (amended) The flat panel display of claim 1, wherein each alignment member is formed with a plurality of exhaust grooves.

11. (amended) The flat panel display of claim 10, wherein the exhaust grooves of the alignment member are positioned along a length of [arranged at] the alignment member [in the longitudinal direction].

12. (amended) The flat panel display of claim 11, wherein the exhaust grooves of the alignment member are arranged symmetrical to each other with respect to a [the] longitudinal axis [center line] of the alignment member.

13. (amended) The flat panel display of claim 4, wherein each subsidiary alignment member is provided with a plurality of exhaust grooves.

14. (amended) The flat panel display of claim 13, wherein the exhaust grooves of the subsidiary alignment member are positioned along a length of [arranged at] the subsidiary alignment member [in the longitudinal direction] while being spaced apart from each other by [with] a predetermined distance.

15. (amended) The flat panel display of claim 14, wherein the exhaust grooves of the subsidiary alignment member are arranged symmetrical to each other with respect to a [the] longitudinal axis [center line] of the subsidiary alignment member.

16. (amended) The flat panel display of claim 1, wherein the image production unit comprises:

a plurality of cathode electrodes formed at the backplate with a predetermined pattern;

an insulating layer formed at the backplate, the insulating layer having a plurality of breakthrough holes formed over [placed on] the cathode electrodes;

a plurality of emitters contacting the cathode electrodes, each emitter being disposed within one of the [each] breakthrough holes;

a plurality of gate electrodes formed on the insulating layer in [with] a predetermined pattern, the gate electrodes having openings [portions communicated] communicating with the breakthrough holes;

an anode electrode formed on the faceplate and [while] facing the gate electrodes; and

a plurality of phosphor layers formed on the anode electrode in [with] a predetermined pattern.

17. (amended) The flat panel display of claim 1, wherein the vacuum degree of the cell is kept to be substantially  $10^{-7}$  torr.